



1

SPO-103

## SEQUENCE LISTING

<110> Sone, Toshio  
Kume, Akinori  
Daiyiki, Kazuo  
Iwama, Akiko  
Kino, Kohsuke

<120> Peptide-based Immunotherapeutic Agent for Treating  
Allergic Diseases

<130> SPO-103

<140> 09/142,524

<141> 1998-09-09

<150> PCT/JP97/00740

<151> 1997-03-10

<160> 14

<170> PatentIn Ver. 2.0

<210> 1

<211> 80

<212> PRT

<213> Cryptomeria japonica

<400> 1

Met Lys Val Thr Val Ala Phe Asn Gln Phe Gly Pro Asn Arg Arg Val  
1 5 10 15

Phe Ile Lys Arg Val Ser Asn Val Ile Ile His Gly Arg Arg Ile Asp  
20 25 30

Ile Phe Ala Ser Lys Asn Phe His Leu Gln Lys Asn Thr Ile Gly Thr  
35 40 45

Gly Arg Arg Ile Ser Leu Lys Leu Thr Ser Gly Lys Ile Ala Ser Arg  
50 55 60

Arg Val Asp Gly Ile Ile Ala Ala Tyr Gln Asn Pro Ala Ser Trp Lys  
65 70 75 80

<210> 2

<211> 105

<212> PRT

<213> Cryptomeria japonica

<400> 2

Met Lys Val Thr Val Ala Phe Asn Gln Phe Gly Pro Asn Arg Arg Val  
1 5 10 15

Phe Ile Lys Arg Val Ser Asn Val Ile Ile His Gly Arg Arg Ile Asp  
20 25 30

Ile Phe Ala Ser Lys Asn Phe His Leu Gln Lys Asn Thr Ile Gly Thr  
35 40 45

Gly Arg Arg Trp Lys Asn Asn Arg Ile Trp Leu Gln Phe Ala Lys Leu  
50 55 60

Thr Gly Phe Thr Leu Met Gly Arg Arg Leu Lys Met Pro Met Tyr Ile  
65 70 75 80

Ala Gly Tyr Lys Thr Phe Asp Gly Arg Arg Val Asp Gly Ile Ile Ala  
85 90 95

Ala Tyr Gln Asn Pro Ala Ser Trp Lys  
100 105

<210> 3

<211> 134

<212> PRT

<213> Cryptomeria japonica

<400> 3

Met Lys Val Thr Val Ala Phe Asn Gln Phe Gly Pro Asn Arg Arg Val  
1 5 10 15

Phe Ile Lys Arg Val Ser Asn Val Ile Ile His Gly Arg Arg Ile Asp  
20 25 30

Ile Phe Ala Ser Lys Asn Phe His Leu Gln Lys Asn Thr Ile Gly Thr  
35 40 45

Gly Arg Arg Trp Lys Asn Asn Arg Ile Trp Leu Gln Phe Ala Lys Leu  
50 55 60

Thr Gly Phe Thr Leu Met Gly Arg Arg Pro Leu Trp Ile Ile Phe Ser  
65 70 75 80

Gly Asn Met Asn Ile Lys Leu Lys Met Pro Met Tyr Ile Ala Gly Tyr  
85 90 95

Lys Thr Phe Asp Gly Arg Arg Ala Glu Val Ser Tyr Val His Val Asn  
100 105 110

Gly Ala Lys Phe Ile Arg Arg Val Asp Gly Ile Ile Ala Ala Tyr Gln  
 115 120 125

Asn Pro-Ala Ser Trp Lys  
 130

<210> 4  
 <211> 31  
 <212> PRT  
 <213> Cryptomeria japonica

<400> 4  
 Ile Phe Ser Lys Asn Leu Asn Ile Lys Leu Asn Met Pro Leu Tyr Ile  
 1 5 10 15

Ala Gly Asn Lys Arg Arg Phe Ile Lys Arg Val Ser Asn Val Ile  
 20 25 30

<210> 5  
 <211> 31  
 <212> PRT  
 <213> Cryptomeria japonica

<400> 5  
 Ser Ser Gly Lys Asn Glu Gly Thr Asn Ile Tyr Asn Asn Asn Glu Ala  
 1 5 10 15

Phe Lys Val Glu Arg Arg Phe Ile Lys Arg Val Ser Asn Val Ile  
 20 25 30

<210> 6  
 <211> 12  
 <212> PRT  
 <213> Cryptomeria japonica

<400> 6  
 Ile Ser Leu Lys Leu Thr Ser Gly Lys Ile Ala Ser  
 1 5 10

<210> 7  
 <211> 9  
 <212> PRT  
 <213> Cryptomeria japonica

<400> 7  
 Phe Ile Lys Arg Val Ser Asn Val Ile  
 1 5

47

<210> 8  
<211> 17  
<212> PRT  
<213> Cryptomeria japonica  
  
<400> 8  
Glu Glu Tyr Leu Ile Leu Ser Ala Arg Asp Val Leu Ala Val Val Ser  
1 5 10 15

Lys

C1  
<210> 9  
<211> 15  
<212> PRT  
<213> Cryptomeria japonica

<400> 9  
Lys Ser Met Lys Val Thr Val Ala Phe Asn Gln Phe Gly Pro Asn  
1 5 10 15

<210> 10  
<211> 32  
<212> PRT  
<213> Cryptomeria japonica

<400> 10  
Glu Glu Tyr Leu Ile Leu Ser Ala Arg Asp Val Leu Ala Val Val Ser  
1 5 10 15

Lys Arg Arg Met Lys Val Thr Val Ala Phe Asn Gln Phe Gly Pro Asn  
20 25 30

<210> 11  
<211> 20  
<212> PRT  
<213> Cryptomeria japonica

<400> 11  
Ile Phe Ser Lys Asn Leu Asn Ile Lys Leu Asn Met Pro Leu Tyr Ile  
1 5 10 15

Ala Gly Asn Lys  
20

48

<210> 12  
<211> 20  
<212> PRT  
<213> Cryptomeria japonica  
  
<400> 12  
Ser Ser Gly Lys Asn Glu Gly Thr Asn Ile Tyr Asn Asn Asn Glu Ala  
1 5 10 15

Phe Lys Val Glu  
20

<210> 13  
<211> 13  
<212> PRT  
<213> Cryptomeria japonica

<400> 13  
Val Phe Ile Lys Arg Val Ser Asn Val Ile Ile His Gly  
1 5 10

<210> 14  
<211> 9  
<212> PRT  
<213> Cryptomeria japonica

<400> 14  
Ser Ile Lys Arg Val Ser Asn Val Ile  
1 5